

Texas Risk Factor Report

Behavioral Risk Factor Surveillance System





Texas Department of Health

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ORAL HEALTH IN TEXAS 1995 Survey Data

Highlights of this Issue

-  **Approximately 8.5 million (64%) non-institutionalized adult Texans reported a past year dental visit.** However, about 1.5 million (11%) have not seen a dentist in 5+ years.
-  **About 500 thousand (26%) older non-institutionalized Texans (65+) have lost all of their natural teeth to oral disease.** This figure does not include older Texans residing in long term care facilities, where proportions of total tooth loss may be higher.
-  **Almost half of Texans surveyed were without any kind of dental insurance.** Higher proportions of older adults, lower income, and lower educated Texans were without coverage.
-  **About 1.3 million Texans reported cost as the main reason for not seeing a dentist in the past year.** Hispanics, and lower income Texans reported inability to see their dentist due to cost more often than other race or income groups, respectively.

Introduction: This report examines oral health issues for 1995 from the Texas Behavioral Risk Factor Surveillance System (BRFSS), a monthly telephone survey sponsored by the Texas Department of Health, Bureau of Chronic Disease Prevention and Control, and supported by the Office of the State Dental Director. **Approximately 1700 randomly selected adult Texans (18 years and older)** were asked questions about their health habits such as "How long has it been since you last visited the dentist or a dental clinic," "What is the main reason you have not visited the dentist in the last year," "How many of your permanent teeth have been removed because of tooth decay or gum disease" and, "Do you have any kind of insurance coverage that pays for some or all of your routine dental care, including dental insurance, prepaid plans such as HMOs, or government plans such as Medicaid?"

Methods: The 1995 BRFSS used a truncated list-assisted sample design for random digit dialing, with adult (aged 18+), non-institutionalized residents with a telephone comprising the sampling frame.

Interviews were conducted by the University of Texas' Office of Survey Research using computerized telephone interviewing technology. Statistical analyses were performed using SUDAAN¹ and EpiInfo version 6.² Data were weighted to reflect the age, sex, and race distribution in Texas, as well as the probability of being drawn into the sample. Weighting ensures that each respondent effectively represents a specific number of Texas residents within a given socio-demographic group. This method of analysis allows the results of the survey to be generalized to the population represented in the sampling frame.

Sex, race/ethnicity, age, educational attainment, household income, and marital status were controlled for through the use of multiple logistic regression. Odds ratios and proportions were evaluated for statistical significance at $p < .05$. This discussion focuses primarily on proportions which showed statistical significance at the level mentioned above, but indicates odds ratios parenthetically (OR), when the use of more sophisticated analytical methods were thought to enhance the reader's understanding or pertinence of the data.

The BRFSS oral health module questions are:

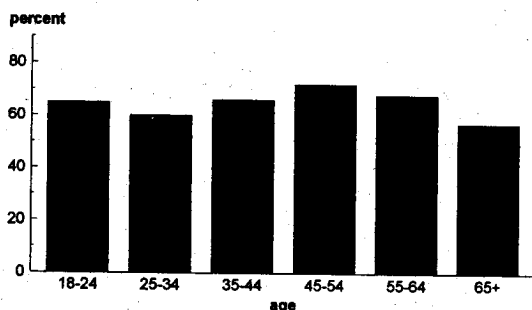
1. How long has it been since you last visited the dentist or a dental clinic?
2. What is the main reason you have not visited the dentist in the last year?
3. How many of your permanent teeth have been removed because of tooth decay or gum disease?
4. Do you have any kind of insurance coverage that pays for some or all of your routine dental care, including dental insurance, prepaid plans such as HMOs, or government plans such as Medicaid?

Questions 1 and 2 were adapted from the National Health Interview Survey and are used to track Healthy People 2000³ oral health objective 13.14 (proportion of adults utilizing the oral health care system annually). Question 3 provides data to track Healthy People 2000 Oral Health Objectives 13.3 (tooth loss from decay or gum disease) and 13.4 (complete tooth loss) among adults. Question 4 provides additional data on financial barrier issues.

Time since last dental visit:

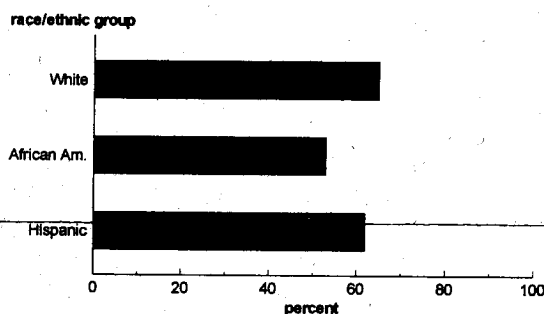
Overall, 64% of adult Texans saw a dentist in the past year and 11% had not seen a dentist in 5 or more years. Females reported a past year dental visit significantly more often than did males (67% and 61% respectively, $p < .05$). Those aged 65+ had a lower estimate of past year dental visits than all other age strata. However, this difference reached statistical significance only when compared with the 45-54 year old age group.

Figure 1
1995 Texas BRFSS
Dental visit in past year by age



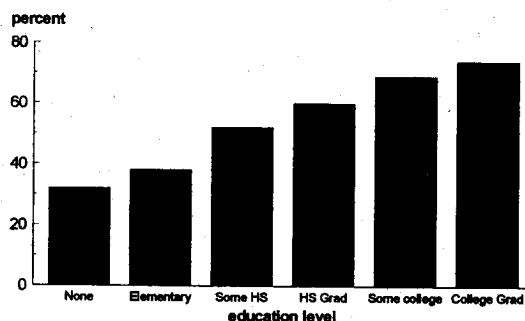
Significantly fewer African Americans (53%) reported a dental visit within the past year compared to white (65%) or Hispanic (62%) persons (Figure 2). African Americans' prevalence was significantly lower than that of Hispanics when controlling for sex, age, education, and income ($OR = .57, P < .05$). Three percent of Hispanic respondents reported never having a dental visit.

Figure 2
1995 Texas BRFSS
Dental visit in past year by race



Almost 40% of those who reported having only an elementary education had a dental visit in the past year versus 74% of college graduates (Figure 3).

Figure 3
1995 Texas BRFSS
Dental visit in past year by educational status

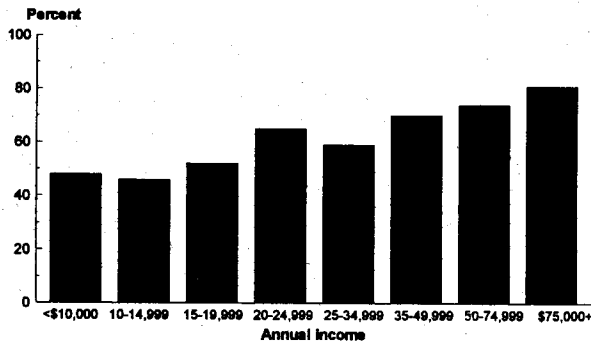


Did you know...?

Annual dental visits are important because oral diseases such as tooth decay, gum disease, and oral cancer are very destructive and often have no early symptoms. Less expensive and less traumatic treatments are possible with early detection -- within a year of onset -- while regular care allows for preventive interventions and even the reversal of some disease.

As household income level increased, the proportion of Texans with a recent dental visit increased as well: The top three income strata reported a past year dental visit significantly more often than did the lowest three income strata ($p < .05$, Figure 4).

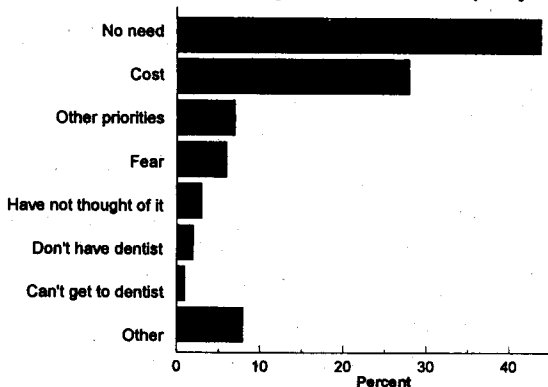
Figure 4
1995 Texas BRFSS
Dental visit in past year by annual income



Reason for lack of past year dental visit:

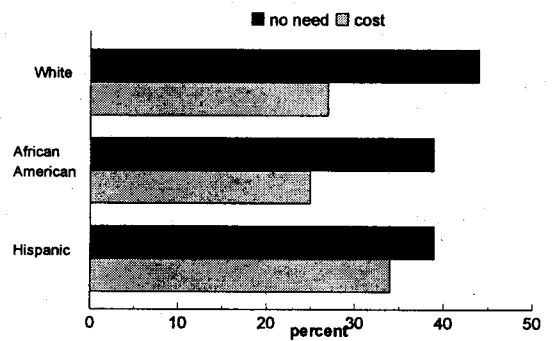
The majority of Texans who had not visited a dentist during the past year indicated "no perceived need to visit a dentist" and, secondly, "cost" as their reason (Figure 5). This finding was consistently observed for both sexes and all race/ethnic groups. Overall 44% of respondents indicated that they had no reason to see a dentist in the past year.

Figure 5
1995 Texas BRFSS
Reason for not having a dental visit in the past year



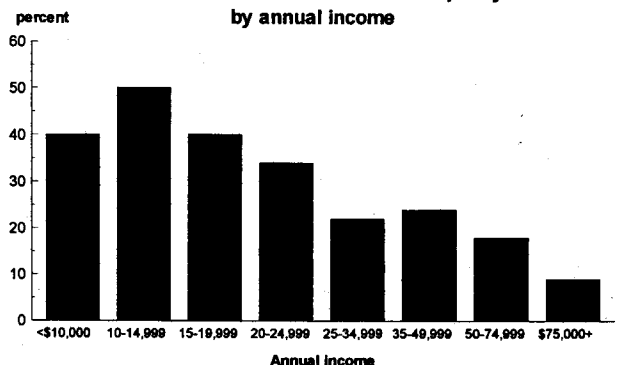
Cost was the second most common reason for not having a dental visit during the past year, with 28% of respondents giving this as their main reason for not seeing a dentist in the past year. Among whites, 27% reported that cost was their main reason for not having a dental visit in the past year, while among African Americans this figure was 25% and among Hispanics 34% (Figure 6).

Figure 6
1995 Texas BRFSS
"No need" and "cost" as reason for no dental visit in past year by race/ethnic group



About 40% of those with household incomes less than \$10,000/year and 50% of those reporting \$10,000-14,999/year versus 22% of those reporting an annual income of \$25,000-34,999/year gave cost as their reason for no dental visit during the past year (Figure 7).

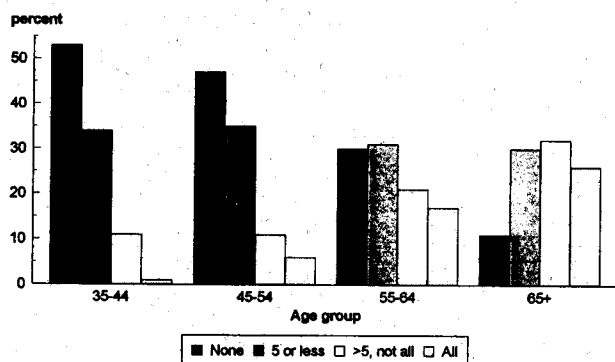
Figure 7
1995 Texas BRFSS
"Cost" as reason for no dental visit in past year by annual income



Number of permanent teeth removed due to tooth decay or gum disease:

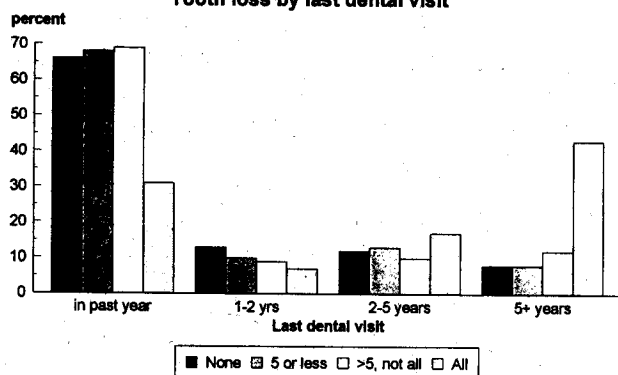
Overall, 7% reported the loss of all natural teeth compared to 52% with no teeth missing due to oral disease. The proportion of those with no tooth loss decreased with age (Figure 8).

Figure 8
1995 Texas BRFSS
Lost teeth by age group



Of those who report 5 or fewer teeth removed, 68% have seen a dentist within the past year, 10% between 1-2 years, 12% between 2-5 years, and 8% greater than 5 years. Among those Texas respondents who reported all teeth extracted due to oral disease, 30% had a dental visit within the past year, while 43% reported no visit for over 5 years (Figure 9).

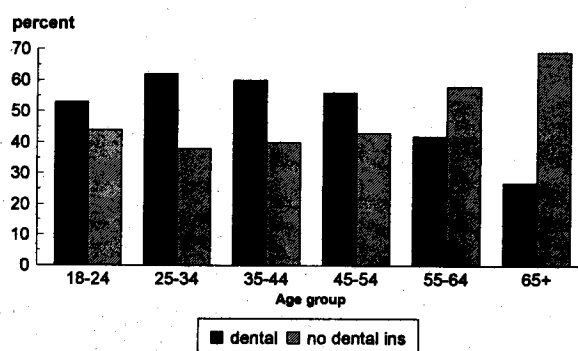
Figure 9
1995 Texas BRFSS
Tooth loss by last dental visit



Lack of dental insurance coverage:

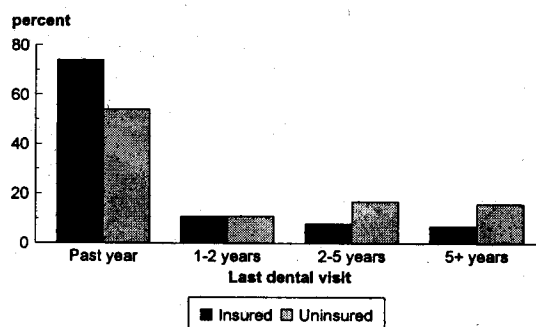
Overall, about 46% of Texans reported that they did not have dental insurance. Starting at age 25, the percentage of Texans with dental insurance begins a steady decline. For older respondents, 65 years and older, about 70% are without dental insurance (Figure 10).

Figure 10
1995 Texas BRFSS
Dental insurance by age group



Having dental insurance is associated with having a dental visit during the past year (Figure 11). Insured respondents had a past year dental visit prevalence of 74% versus 54% for those without dental health coverage (OR = 2.2, $P < .05$).

Figure 11.
1995 Texas BRFSS
Last dental visit by dental insurance status



Also, whether an individual has dental insurance is associated with annual income level. Approximately 24% of individuals with annual incomes of less than \$10,000 report having dental insurance. However, about 64% of individuals with household incomes of \$35-49,999 have dental insurance (Figure 12).

Conclusions:

* Males, African Americans, and elderly persons reported a past year dental visit less often than did females, other race/ethnic groups, and younger persons respectively.

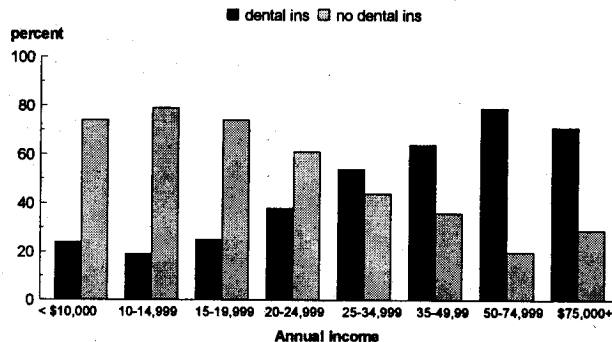
* "No perceived need" and "cost" were the most common reasons why adult Texans did not have a dental visit during the past year.

* As education level increased, tooth loss decreased, while past year dental visits increased with educational attainment.

* Almost half of Texans indicated they had no dental insurance, while among elderly persons this figure rose to about 70%.

* The highest proportion of those with dental insurance are also in the higher income groups.

Figure 12
1995 Texas BRFSS
Dental insurance status by annual income



Recommendations:

* Encourage all persons to seek regular dental visits to provide early diagnosis, treatment, and prevention of oral diseases, especially males, African Americans, and older Texans.

* Provide oral health education to reach those not using the oral health care system due to lack of perceived need.

* Promote better oral health through culturally sensitive education and interventions, especially for Hispanics, African Americans, and lower educated Texans.

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2. Dean AG et al. Epi Info 6. Centers for Disease Control and Prevention, Atlanta, GA, 1994.
3. *Healthy People 2000, National Health Promotion and Disease Prevention Objectives*. US Dept. of Health and Human Services, Public Health Service. Washington, DC: (PHS) 91-50212, 1991.
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Did you know...?



Most tooth loss is the result of untreated tooth decay and/or gum diseases.



Loss of natural teeth can influence systems beyond the oral/dental and affect psychological, social and physical well being. Although dentures may replace missing teeth, there may still be limitations in speech, chewing ability, and quality of life.



Fifty to 77% of elderly persons residing in long-term care facilities have lost *all* of their natural teeth.⁴

Table 1: Dental Risk Factors by Selected Variables

	Last Dental Visit					Dental Insurance		Tooth Loss			Reason For Not Seeing Dentist in Past Year						
	Past Year	1-2 years	2-5 years	5+ years	Never	Yes	No	None lost	< = 5	> = 6, not all	All lost	cost	can't get to office	no dentist	fear pain	no need	other priority
Overall (percents)	64	11	12	11	1	52	46	52	28	12	7	28	1	2	6	44	7
Age																	
18-24	65	11	13	10	1	53	44	83	14	0	4	46	0	1	3	37	9
25-34	60	17	14	7	1	62	38	73	23	4	1	24	2	4	11	30	12
35-44	65	11	13	10	1	59	40	53	34	11	1	40	1	0	6	33	9
45-54	72	9	10	9	0	56	43	47	35	11	6	26	2	2	6	45	2
55-64	68	7	12	12	2	42	58	30	31	21	17	16	0	1	8	58	5
65+	57	8	10	22	1	27	69	11	30	32	26	13	1	1	2	74	2
Sex																	
Male	61	10	14	13	1	53	45	53	28	11	6	28	0	1	4	48	8
Female	67	12	11	9	1	51	47	51	27	13	8	28	2	2	9	38	7
Race/Eth.																	
White	65	11	12	11	1	55	45	53	26	13	8	27	1	2	7	44	8
African American	53	15	14	15	0	50	46	33	36	21	8	25	4	2	2	57	2
Hispanic	62	9	14	11	3	42	55	52	36	7	4	34	1	1	5	39	7
Other	63	10	13	14	1	53	47	61	26	8	3	22	0	0	0	34	10
Education																	
None Attained	32	6	11	23	19	10	80	24	53	0	12	33	0	0	0	62	0
Elementary	38	11	21	24	4	23	72	30	26	20	21	32	0	1	1	52	5
Some High School	52	10	15	20	2	29	67	31	26	21	22	23	2	0	3	58	2
High School Grad	60	11	15	13	1	47	53	48	31	15	6	36	1	1	5	40	7
Some College	69	13	11	8	0	59	40	56	28	10	6	26	2	2	6	40	10
College Grad	74	11	8	7	1	65	34	66	25	7	2	18	2	3	13	40	10
Income/yr																	
<\$10,000	48	4	23	22	2	24	74	35	30	19	14	40	0	2	1	51	1
10-14,999	46	14	11	23	3	19	79	36	29	15	16	50	0	1	0	36	7
15-19,999	52	8	18	22	1	25	74	45	23	17	14	40	0	0	4	47	3
20-24,999	65	10	13	12	1	38	61	45	26	19	10	34	1	1	5	38	6
25-34,999	59	15	15	11	1	54	44	50	28	13	8	22	0	3	8	49	8
35-49,999	70	13	10	8	1	64	36	57	28	8	5	24	5	3	7	32	14
50-74,999	74	11	9	6	0	79	20	65	28	5	1	18	0	1	7	39	13
\$75,000+	81	9	6	4	1	71	29	64	24	10	1	9	3	0	19	50	5

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